WHAT IS CLAIMED IS:

1. A method of forming an alignment film comprising:

irradiating an atomic beam onto a thin film including a carbon-carbon double bond to form a polarized functional group by transforming the carbon-carbon double bond into a carbon-carbon single bond and a radical state; and

combining a polarity preserving material with the polarized functional group so as to preserve a polarity of the polarized functional group.

2. The method of claim 1, wherein the polarity preserving material is a hydroxyl radical (OH-), water being provided to a surface of the thin film, so that the hydroxyl radical (OH-) is combined with the polarized functional group.

3. The method of claim 2, wherein the water is in a vapor state.

4. The method of claim 1, wherein the polarity preserving material is combined with the polarized functional group by:

providing water to a surface of the thin film including the polarized functional group; and

irradiating an ultraviolet light onto the surface of the thin film to combine hydrogen ions with the polarized functional group.

5. The method of claim 1, wherein the polarity preserving material is combined with the polarized functional group by:

dissociating nitrogen gas into nitrogen ions at a pressure that is lower than an atmospheric pressure; and

providing the nitrogen ions to the surface of the thin film to combine the nitrogen ions with the polarized functional group.

6. The method of claim 5, wherein the nitrogen gas is heated at a temperature above about 2500K to be dissociated into the nitrogen ions.

7. The method of claim 5, wherein the nitrogen gas undergoes electric fields to be dissociated into the nitrogen ions.

8. The method of claim 1, wherein the polarity preserving material is hydrogen ions, hydrogen gas being dissociated into the hydrogen ions under vacuum, so that the hydrogen ions being combined with the polarized functional group.

9. The method of claim 8, wherein the hydrogen gas is heated to be transformed into hydrogen ions at a temperature above about 2500K.

10. The method of claim 8, wherein the hydrogen gas is dissociated by applying electric fields to the hydrogen gas.

11. The method of claim 1, wherein the polarized functional group is formed by:

forming a first ion beam that forms a first angle with respect to the thin film;

transforming the first ion beam into a second ion beam, a cross section of the second ion beam having a square-shape; and

transforming the second ion beam into the atomic beam.

12. The method of claim 11, wherein the first ion beam is formed by:

providing a source gas;

dissociating the source gas into ions; and

accelerating the ions to form the first ion beam.

13. The method of claim 12, wherein the source gas is an argon (Ar) gas.

14. The method of claim 12, wherein the argon (Ar) gas is heated at a temperature above about 2500K to be dissociated into argon ions.

15. The method of claim 12, wherein the argon (Ar) gas is dissociated by applying plasma-generating electric fields to the argon (Ar) gas.

16. The method of claim 11, wherein the first ion beam is allowed to pass through an outlet of a housing to be focused.

17. The method of claim 16, wherein the outlet of the housing has a rectangular shape.

18. The method of claim 11, wherein the atomic beam is formed through intersecting the second ion beam with an electron beam.

19. The method of claim 18, wherein the electron beam is formed by:

heating a tungsten filament to emit electrons; and

accelerating the electrons in a direction that is substantially perpendicular to a direction of the second ion beam.

20. The method of claim 19, wherein the electrons are accelerated due to an electrode having a positive polarity, the electrode being disposed at an opposite position to the tungsten filament with respect to the second ion beam.

21. An apparatus of forming an alignment film comprising:

an atomic beam irradiating part that irradiates an atomic beam onto a thin film including a carbon-carbon double bond to form a polarized functional group by transforming the carbon-carbon double bond into a carbon-carbon single bond and a radical state; and

a polarization maintaining part that combines a polarity preserving material with the polarized functional group so as to preserve a polarity of the polarized functional group.

22. The apparatus of claim 21, wherein the polarization maintaining part comprises:

a chamber;

a spraying module disposed in the chamber, the spraying module spraying a water onto the thin film; and

a water supplying module that supplies the splaying module with water.

23. The apparatus of claim 22, further comprising a heating unit that heats the water to generate vapor.

24. The apparatus of claim 21, wherein the polarization maintaining part comprises:

a chamber;

a water supplying module that supplies the thin film disposed of the chamber with water; and

an ultraviolet irradiating part that irradiates an ultraviolet ray onto the thin film.

25. The apparatus of claim 21, wherein the polarization maintaining part comprises:

a chamber;

a polarization maintaining material supplying part disposed in the chamber, the polarization maintaining material supplying part supplying the thin film with a polarization maintaining material; and

a dissociation part that dissociates the polarization maintaining material into ions.

26. The apparatus of claim 25, wherein the polarization maintaining material supplying part supplies a nitrogen (Ni) gas or a hydrogen (H) gas into the chamber.

27. The apparatus of claim 25, wherein the dissociation part is a heating unit that heats the polarization maintaining material.

28. The apparatus of claim 27, wherein the heating unit comprises a tungsten (W) filament.

29. The apparatus of claim 21, wherein the atomic beam irradiating part comprises:

a first ion beam generating unit that generates a first ion beam advancing toward the thin film;

a second ion beam generating unit that transforms the first ion beam into a second ion beam, the second ion beam forming a first angle with a respect to the thin film, a cross section of the second ion beam having a rectangular shape;

an atomic beam generating unit that transforms the second ion beam into an atomic beam; and

a transferring unit which changes a distance between the thin film and the atomic beam generating unit.